IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION OF:	MINORU MUKAIDA
SERIAL NO:	09/740,345
FILED:	DECEMBER 18, 2000
TITLE:	ENERGY CONSUMPTION EFFICIENCY IMPROVING AGENT AND METHOD, AND ARTICLE HAVING IMPROVED ENERGY CONSUMPTION EFFICIENCY
ART UNIT:	1773
EXAMINER:	HOLLY C. RICKMAN

DECLARATION UNDER RULE 1.132

I, the undersigned declarant, hereby state as follows:

I am Satoru ABE, a Japanese citizen residing at Shinagawa-ku, Japan.

I am an expert in the field of chemistry. My curriculum vitae is attached.

I have reviewed the above-referenced application in detail, and fully understand the invention disclosed and claimed therein.

I conducted the experiments set forth in detail in the following description, according to the instructions of the inventor Mr. Mukaida, who has now retired.

I submit this declaration in support of the above-referenced application.

EXPERIMENT

1. Dynamic friction coefficient test

(1) Measuring method

The samples were applied to the rubber test pieces. The dynamic friction coefficients measured with steel plate by the method of JIS K7125 (1999).

(2) Measuring condition

Test Activity: Chemicals Evaluation and Research Institute,

Japan Rubber test piece :

Rubber: LDR

Sizes: 120mmx120mmx25 mm

Groove distance: 20 mm

Groove width: 0.8 mm

Groove depth: 5 mm

Samples: Blank, Example according to the invention, Craven's example 3A

Load: 2200g

Object: steel plate

Measuring speed: 100 mm/min

(3) Results

Measuring results are shown in the following Table 1. Dynamical friction coefficient of example 3 is 15% higher than that of blank sample in Table 1. On the other hand, Dynamical friction coefficient of Craven's example 3A is 50% lower than that of blank sample in Table 1.

Therefore, it is clear that an energy consumption efficiency can not be improved according to the invention disclosed in Craven.

Samples	Dynamic friction coefficient	Dynamic friction coefficient (average)	The ratio for the blank (%)
Blank	1.84	—	
Example 3	2.09	2.12	15
Example 3	2.14		
Craven's example 3A	1.02	0.92	-50
Craven's example 3A	0.81		

All statements made herein on knowledge are true, and all statements made on information and belief are believed to be true; and further these statements were made with the knowledge that willful false statement and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Date: March 21, 2008

Satoru ABE

Curriculum vitae

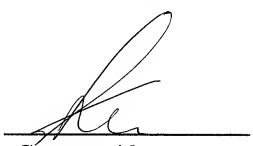
Name : Satoru Abe

Name of university : Kagoshima University

Graduation Date : Mar. 1982

Specialty : Chemistry

Date: March 21, 2008



Satoru Abe